Amendments to the Claims:

The following listing of claims replaces all prior listings of claims:

Listing of Claims:

1. (Currently Amended) A system comprising:

a first-tier mesh, a second-tier mesh, and a third-tier mesh, wherein the first-tier mesh, the second-tier-mesh, and the third-tier mesh operate and communicate according to different mesh architectures based on at least two of a point-to-point-mesh architecture, a pre-configured-mesh architecture, and an ad-hoc-mesh architecture, the first-tier mesh, the second-tier mesh, and the third-tier mesh configured as separate networks;

wherein the first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes configured to communicate data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node configured to communicate via the second-tier mesh,

wherein the at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate data within the second tier with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further configured to communicate with the first-tier sink node of said first-tier mesh and configured to communicate via the third-tier,

wherein the third-tier mesh formed of a plurality of third-tier nodes, each of the third-tier nodes of the plurality of third-tier nodes configured to communicate data with at

least selected others of the third-tier nodes and at least one of the second-tier mesh and the third-tier mesh, at least one of the third-tier nodes forming a third-tier sink node,

wherein the system is configured to provide radio communication of data therein, and the first-tier nodes of said first-tier mesh operate and communicate based on first-tier-mesh operational characteristics, wherein the second-tier nodes of said second-tier mesh operate and communicate based on second-tier-mesh operational characteristics, and wherein the third-tier nodes of said third-tier mesh operate and communicate based on third-tier-mesh operational characteristics, and wherein each of the first-tier mesh, the second-tier mesh, and the third-tier mesh includes at least one sink node to provide communications among the first-tier mesh, the second-tier mesh, and the third-tier mesh.

2. (Cancelled)

3. (Currently Amended) The system apparatus of claim [[22]] 1, wherein the first-tier-mesh operation characteristic comprise a first frequency band within which communication of data is effectuated, wherein the second-tier-mesh operation characteristics comprise a second frequency bandwidth within which communication of data is effectuated, the first frequency bandwidth and the second frequency bandwidth having at least plurality nonoverlapping portions.

4. (Currently Amended) The system apparatus of claim [[22]] 1, wherein at least one first-tier node of said first-tier mesh and at least one second tier node of said

second-tier mesh are co-located, the at least one first-tier node co-located with the at least one second-tier node configured to communicate with the at least selected others of the first-tier-nodes and at least one second-tier node co-located with the at least one first-tier node configured to communicate with at least selected other second-tier nodes.

5. (Canceled)

6. (Currently Amended) The system apparatus of claim [[22]] 1, wherein the first-tier nodes comprise mobile nodes configured to move throughout a selected area.

7. (Currently Amended) The system apparatus of claim [[5]] 1, wherein communication of data is effectuated pursuant to non line of sight communication techniques.

8. (Canceled)

9. (Currently Amended) The system of claim [[8]] 1, wherein the second-tier nodes are stationary.

10. (Previously Presented) The system of claim 9, wherein communication of data is effectuated pursuant to line of sight communication techniques.

11. (Currently Amended) A system comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes configured to communicate data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate data within the second tier with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further configured to communicate with the first-tier sink node of said first-tier mesh and a third-tier mesh separate from the first-tier mesh and the second-tier mesh; and

wherein the third-tier mesh formed of a plurality of third-tier nodes, each of the third-tier nodes of the plurality of third-tier nodes configured to communicate data with at least selected others of the third-tier nodes, at least one of the third-tier nodes forming a third-tier sink node,

wherein the system is configured to provide radio communication of data therein, and the first-tier nodes of said first-tier mesh operate and communicate based on first-tier-mesh operational characteristics, and wherein the second-tier nodes of said second-tier mesh operate and communicate based on second-tier-mesh operational characteristics, first-tier-mesh operational topological characteristics and second-tier-mesh operational topological characteristics being different, wherein the first-tier mesh and the second-tier mesh operate and communicate according to different mesh architectures based on at least one of a point-to-point-mesh architecture, a pre-

configured-mesh architecture and an ad-hoc-mesh architectures, and wherein each of the first-tier mesh, the second-tier mesh, and the third-tier mesh includes at least one sink node to provide communications among the first-tier mesh, the second-tier mesh, and the third-tier mesh.

12. (Previously Presented) The system of claim 11, wherein the first-tier nodes of said first-tier mesh operate and communicate based on first-tier mesh operational characteristics wherein the second-tier nodes of said second-tier mesh are operational pursuant to second-tier-mesh operational characteristics, and wherein the their-tier nodes of said third-tier mesh are operational pursuant to third-tier-mesh operational characteristics, the first-tier, second-tier, and third-tier mesh operational characteristics, respectively, being in some part dissimilar.

13. (Previously Presented) The system of claim 11, wherein said third-tier mesh comprises a point-to-point mesh which exhibits a fixed configuration and a fixed number of third-tier nodes.

14. (Previously Presented) The system of claim 13, wherein communication of data between the third-tier nodes is effectuated pursuant to line of sight communication techniques.

15. (Canceled)

16. (Currently Amended) The system of claim [[15]] 11, further comprising an other of the second-tier nodes of said second-tier mesh positioned between the first second-tier sink node and the second second-tier sink node, communications between the first and second second-tier sink nodes effectuated by way of the other of the second-tier nodes.

17. (Currently Amended) The system of claim [[15]] 11, wherein data communicated between the first-tier nodes of said first-tier mesh is communicated at a first data rate, wherein data communicated between the second tier nodes of said second-tier mesh is communicated at a second data rate, the second data rate greater than the first data rate such that data communicated between the first and second first-tier sink nodes is communicated more quickly by way of the first and second second-tier sink nodes than by way of the first-tier nodes of said first-tier mesh.

Claims 18-19 (Cancelled)

20. (Currently Amended) A method comprising:

forming a wireless access network providing for communication therein;

forming a first-tier mesh of a plurality of first-tier nodes, each of the first-tier nodes configured to communicate data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node; and

forming a second-tier mesh of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate data within the second tier with at least selected others of the second-tier nodes, at least one of the second tier nodes forming a second-tier sink node further configured to communicate with the first-tier sink node of the first-tier mesh formed during said operation of forming the second-tier mesh and with a point-to-point mesh separate from the first-tier mesh and the second-tier mesh[[.]]; and

forming a third-tier mesh of a plurality of third-tier nodes, each of the third-tier nodes of the plurality of third-tier nodes configured to communicate data within the third-tier with at least selected others of the third-tier nodes, at least one of the third-tier nodes forming a third-tier sink node further configured to communicate with at least one of the first-tier sink node and the second-tier sink node; and

wherein the first-tier nodes of said first-tier mesh operate and communicate based on first-tier-mesh operational characteristics, and wherein the second-tier nodes of said second-tier mesh operate and communicate based on second-tier-mesh operational characteristics, first-tier-mesh operational topological characteristics and second-tier-mesh operational topological characteristics being different, wherein the first-tier mesh and the second-tier mesh operate and communicate according to different mesh architectures based on at least one of a point-to-point-mesh architecture, a pre-configured-mesh architecture and an ad-hoc-mesh architecture, and wherein each of the first-tier mesh, the second-tier mesh, and the third-tier mesh includes at least one sink node to provide communications among the first-tier mesh, the second-tier mesh, and the third-tier mesh.

21. (Previously Presented) The system of claim 1, wherein at least one first-tier node of said first-tier mesh and at least one second tier node of said second-tier mesh are not co-located, the at least one first-tier node located distant from the at least one second-tier node configured to communicate with the at least selected others of the first-tier-nodes and the at least one second-tier node located distant from the at least one first-tier node configured to communicate with the at least selected others of the second-tier nodes.

22.   (Canceled)

23.   (Currently Amended) The <u>system</u> ~~apparatus~~ of claim [[22]] <u>1</u>, wherein the first-tier mesh comprises an ad-hoc mesh which exhibits an ad-hoc configuration and an ad-hoc number of the at least one first-tier node.

Claims 24-29.   (Canceled)

30. (Currently Amended) The method of claim [[28]] <u>20</u>, wherein the first-tier-mesh operation characteristic comprise a first frequency band within which communication of data is effectuated, wherein the second-tier-mesh operation characteristics comprise a second frequency bandwidth within which communication of data is effectuated, the first frequency bandwidth and the second frequency bandwidth having at least plurality nonoverlapping portions.

31. (Currently Amended) The method of claim [[28]] 20, wherein at least one first-tier node of said first-tier mesh and at least one second tier node of said second-tier mesh are co-located, the at least one first-tier node co-located with the at least one second-tier node configured to communicate with the at least selected others of the first-tier-nodes and at least one second-tier node co-located with the at least one first-tier node configured to communicate with at least selected other second-tier nodes.

32. (Currently Amended) The method of claim [[28]] 20, wherein the first-tier nodes comprise mobile nodes configured to move throughout a selected area.

33. (Currently Amended) The method of claim [[28]] 20, wherein communication of data is effectuated pursuant to non line of sight communication techniques.